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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,596	08/09/2001	Zhong-Hua Wang	YOR9-2001-0451US1 (8728 -	5429

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EXAMINER	
EHICHIOYA, FRED I	

ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,596	WANG ET AL.	
	Examiner	Art Unit	
	Fred I. Ehichioya	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on 02 December 2004, PROSECUTION IS HEREBY REOPENED. The rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. After an Appeal Conference, Conferees decided to withdraw the finality of the last Office Action and therefore, the finality of that action is withdrawn.

3. With respect to claims 1 – 33, detail action follows:

Specification

4. The disclosure is objected to because of the following informalities: Applicants reference steps 110a-c in FIG.2 on pages 9 - 11. These steps are not disclosed in Fig. 2. Appropriate correction is required.

Response to Arguments

5. Applicants argue:

The combined teachings of Buist, and Barr fail to teach or suggest "a weight for the at least one name, and baseforms of the at least one name," "automatically updating" and automatically updating a grammar file," (page 4, para 1).

Regarding the argument (a), Examiner respectfully disagrees with the applicants.

In light of the specification:

(a) applicants disclose on page 10, lines 11 – 17 that "weight" includes "transaction volume" and that "other information may be used in conjunction with or in place of the transaction volume".

(b) applicants disclose on page 16, lines 17 – 28 examples of "baseform" which includes a combined word.

(c) applicants disclose on page 14, lines 11 – 25 that "grammar file'" includes a plurality of entries, with each entry corresponding to a stock or mutual fund.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, in light of the specification, Broka et al discloses

(1) a weight for the at least one name (see fig. 209a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE").

(2) baseforms of the at least one name (see fig.22: This figure includes "short" and "combined words").

(3) automatically updating" and automatically updating a grammar file (see fig.28; column 15, lines 4 – 11, column17, lines 15 – 27 and column 21 lines 65 – 67; fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour").

6. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Office Action.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,408,282 issued to Walter D. Buist (hereinafter "Buist") in view of USPN 5,761,442 issued to Dean S. Barr et al (hereinafter "Barr") and further in view of USPN 5,809,483 issued to William Broka et al (hereinafter "Broka").

Regarding claims 1 and 22, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column2, lines 41 – 67) system, comprising the steps of:

automatically updating, on a pre-specified basis, a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund (see Fig.60 and column 6, lines 25 – 61), a weight for the at least one name (see Broka: fig. 209a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"), and baseforms of the at least one name (see Broka: fig.22: this figure includes "short" and "combined words"); and

Buist does not explicitly teach a weight for the at least one name, automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names.

Barr teaches a weight (see column 4, lines 51 – 57).

Broka teaches a weight for the at least one name (see Broka: fig. 209a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"), and baseforms of the at least one name (see fig.22: this figure includes "short" and "combined words").

automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names (see fig.28; column 15, lines 4 – 11, column17, lines 15 – 27 and column 21 lines 65 – 67; fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour").

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed Buist's system to provide a method for stock selection on the basis of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 - 51.

Further, "automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names" as thought by Broka would prove Buist and Barr's system a computerized bond trading system to gather quote and trade information from several bond traders and other users, and to organize and disseminate such information quickly and reliably as suggested by Broka at column 1, lines 56 - 60.

Regarding claims 2, 14, and 23, Buist teaches the steps of:

automatically identifying, from web sites, stocks and funds that are no longer listed on a market (see column 10, lines 25 – 50); and

automatically removing from the database any of the plurality of entries corresponding to the identified stocks and funds (see column 10, lines 53 – 54).

Regarding claims 3 and 24, Buist teaches the steps of:

automatically identifying, from web sites, newly listed stocks and newly listed funds, if any (see column 10, lines 26 – 34); and

automatically creating an entry in the database for each of the newly listed stocks and the newly listed funds (see column 11, lines 1 – 14).

Regarding claims 4 and 25, Buist teaches the steps of:

generating the baseforms of the names of the newly listed stocks and the newly listed funds (see column 11, lines 54 – 67).

Buist does not explicitly teach determining the weights for the names of the newly listed stocks and the newly listed funds.

Barr teaches determining the weights for the names of the newly listed stocks and the newly listed funds (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed

Buist's system to provide a method for stock selection on the basis of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 – 51.

Regarding claims 5, 16 and 26, Buist teaches the steps of:

identifying the transaction volumes of any stocks and funds for which an entry exists in the database (see Fig. 6 step 677 and column 13, lines 14 - 40);

quantizing the transaction volumes into a plurality of bands (see column 13, lines 27 – 40).

Buist does not explicitly teach assigning a corresponding weight to each of the plurality of bands.

Barr teaches assigning a corresponding weight to each of the plurality of bands (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed Buist's system to provide a method for stock selection on the basis of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 – 51.

Regarding claims 6 and 27, Barr teaches wherein a given corresponding weight assigned to a given band corresponds to each of the names of any of the stocks and funds in the given band (see column 2, lines 2 – 11).

Regarding claims 7, 17 and 28, Buist teaches the steps of:

automatically combining short words in the database to form combined words, a short word being a stock name or a fund name that has less than a predefined number of phonemes (see Figs. 5, 51 and column 34, lines 40 – 65);

Broka teaches automatically generating the baseforms for the combined words; and updating the grammar file to include the combined words (see fig.22: this figure includes "short" and "combined words").

Regarding claims, 18 and 29, Barr teaches wherein said step of updating the database comprises the step of automatically adapting the weights for the names in the database, based upon a transaction volume over a predetermined period of time (see column 7, line 66 thru column 8, line 18).

Regarding claims 9 and 30, Buist teaches wherein said step of updating the database is performed on a pre-specified basis (see column 17, lines 44 – 47).

Regarding claims 10 and 31, Buist teaches wherein the pre-specified basis is daily (see column 36, lines 20 – 27).

Regarding claims 11, 19 and 32, Buist teaches wherein each of the plurality of entries further comprises one of corresponding resolved stock names or corresponding resolved fund names, if any (see column 14, line 60 thru column 15, line 26).

Regarding claims 12, 20 and 33, Buist teaches wherein each of the plurality of entries further comprises corresponding stock nicknames or corresponding fund nicknames, if any (see Fig. 8).

Regarding claim 13, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column 2, lines 41 – 67) system, comprising the steps of:

constructing a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund (see column 10, line 63 thru column 11, line 14), a weight for the at least one name (see Broka: fig. 209a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"), and baseforms of the at least one name (see Broka: fig.22: this figure includes "short" and "combined words");

automatically updating the database on a pre-specified basis, including adding new entries for newly listed stocks and newly listed funds and removing any of the plurality of entries corresponding to newly unlisted stocks and newly unlisted funds (see column 10, lines 53 – 54);

Buist does not explicitly teach a weight for the at least one name, generating a grammar file for names in the database, the grammar file including the names and weights for the names (see Fig.60 and column 6, lines 25 – 61);

and automatically updating the grammar file with respect to the newly listed stock names and the newly listed fund names (see column 10, line 63 thru column 11, line 14).

Barr teaches a weight (see column 4, lines 51 – 57).

Broka teaches a weight for the at least one name (see Broka: fig. 209a: "weight" in this case for the name "AS.GA or ARMCO" is either "ASK" or "SIZE"),

generating a grammar file for names in the database; the grammar file including the names and weights for the names (see fig.28; column 15, lines 4 – 11, column17, lines 15 – 27 and column 21 lines 65 – 67; fig. 28 shows a plurality of entries (associated with "AS.GA", "A.ZZ" and AAG.GA") that includes "bid, ask and size"; these entries that include the high, low and volume are automatically updated by system on every hour");

and automatically updating the grammar file with respect to the newly listed stock names and the newly listed fund names (see fig.28; column 15, lines 4 – 11, column 17, lines 15 – 27 and column 21 lines 65 – 67: "entries that include the high, low and volume are automatically updated by system on every hour")

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Barr's teaching of weights that form the basis of long term portfolio would have allowed

Buist's system to provide a method for stock selection on the basis of appreciation potential parameters estimated using a neural network system for each stock in a given capital market as suggested by Barr at column 3, lines 33 - 51.

Further, "automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names" as thought by Broka would prove Buist and Barr's system a computerized bond trading system to gather quote and trade information from several bond traders and other users, and to organize and disseminate such information quickly and reliably as suggested by Broka at column 1, lines 56 - 60.

Regarding claim 15, Buist teaches wherein said step of adding the new entries for the newly listed stocks and the newly listed funds comprises the step of automatically identifying, from web sites, the newly listed stocks and newly listed funds, if any (see column 10, line 63 thru column 11, line 28).

Regarding claim 21, Broka teaches wherein said step of updating the database comprises the step of automatically generating baseforms of the newly listed stock names and the newly listed fund names (see fig.22: this figure includes "short" and "combined words").

Conclusion

8. The prior art made of record and not relied upon are considered pertinent to applicants' disclosure.

(a) Hollerman (U.S. Pub. No. 2003/0023536 A1)

(b) Denenberg (U.S. Pub. No. 2002/0087328 A1)

(c) Lupien (USPN 5,101,353)

(d) Trojan (USPN 5,297,032)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya
Patent Examiner
Art Unit 2162

March 21, 2005

SHAHID ALAM
PRIMARY EXAMINER